14 MAY 1997 16:29:47   U.S. Patent & Trademark Office   P0001

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*                                                           *
*          Welcome to MESSENGER (APS Text) at USPTO         *
*                                                           *
*                                                           *
*    The USPTO production files are current through:        *
*    13 May 1997 for U.S. Patent Text Data.                 *
*    13 May 1997 for U.S. Current Classification data.      *
*    13 May 1997 for U.S. Patent Image Data.                *
*                                                           *
*        * PLEASE USE 305-9000 FOR NEW TELEPHONE NUMBER *   *
-***********************************************************
*    A new set of Messenger enhancements is available,      *
*    effective December 9, 1996.  The new FOCUS command     *
*    allows you to display your search results in relevance- *
*    ranked order.  Enter FOCUS and the L-number you want   *
*    to view (e.g., FOCUS L5), and then display the resulting *
*    L-number (e.g., D L6 1-12).                            *
*    See also HELP FOCUS.                                   *
***********************************************************
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*  DISCLAIMER:                                              *
*  Neither the United States Government, nor any agency     *
*  thereof, nor any of their contractors, subcontractors or *
*  employees make any warranty, expressed or implied,       *
*  including any warranty of marketability of fitness for a *
*  particular purpose; nor assumes any legal liability or   *
*  responsibility for any party's use, or the results of    *
*  such, of the data.                                    *14 MAY 1997 1
```

6:29:48   U.S. Patent & Trademark Office   P0002

```
*                                                           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*              Help Desk --> 703-305-9000                   *
*                                                           *
*    The Help Desk is staffed for APS support 7 days/week.  *
*      Monday through Friday:      6:30am - 9:00pm          *
*      Saturday, Sunday, Holidays: 8:30am - 5:00 pm         *
*                                                           *
*    The Help Desk staff at this number will handle all APS *
*    related questions.                                     *
*                                                           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*                                                           *
*    >>>>>>>>>>>>> NEW SUNDAY HOURS !!! <<<<<<<<<<<<<<       *
*                                                           *
*    The APS is available:                                  *
*            6:30am - 9:00pm Monday through Friday          *
*            7:30am - 5:00pm Saturday, Sunday, Holidays     *
*                                                           *
*      APS is unavailable Thanksgiving Day, Christmas Day,  *
*      and New Year's Day.                                  *
*                                                           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```
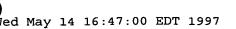
FILE 'USPAT' ENTERED AT 16:29:48 ON 14 MAY 1997

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*              W E L C O M E    T O    T H E                *
*        U. S.   P A T E N T    T E X T    F I L E          *
```

```
    * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
14 MAY 1997 16:29:48            U.S. Patent & Trademark Office            P0003
```

```
=> e-mail(p)server
        1250153 E
           7623 MAIL
            310 E-MAIL
                (E(W)MAIL)
           4263 SERVER
L1           50 E-MAIL(P)SERVER

=> d 1-50
```

1. 5,625,816, Apr. 29, 1997, Method and system for generating product performance history; Randy Burdick, et al., 395/614; 364/489, 571.02; 379/93, 112; 395/210, 228 [IMAGE AVAILABLE]

2. 5,617,221, Apr. 1, 1997, Facsimile modem for passing image information to a facsimile machine and computer; Hans DeVries, et al., 358/442; 379/93 [IMAGE AVAILABLE]

3. 5,610,915, Mar. 11, 1997, System and method therefor of viewing call traffic of a telecommunications network; Isaac Elliott, et al., 370/259; 379/207 [IMAGE AVAILABLE]

4. 5,604,860, Feb. 18, 1997, Feature library and stored customized control interfaces; Denise C. McLaughlin, et al., 395/326, 352 [IMAGE AVAILABLE]

5. 5,604,803, Feb. 18, 1997, Method and apparatus for secure remote authentication in a public network; Ashar Aziz, 380/25, 21 [IMAGE AVAILABLE]

6. 5,600,643, Feb. 4, 1997, Broadband intelligent telecommunications network and method providing enhanced capabilities for customer premises equipment; Richard B. Robrock, II, 370/399, 259, 426; 379/115 [IMAGE AVAILABLE]

7. 5,598,536, Jan. 28, 1997, Apparatus and method for providing remote users with the same unique IP address upon each network access; Frank G. Slaughter, III, et al., 395/200.16; 379/95; 395/200.15 [IMAGE AVAILABLE]

8. 5,572,643, Nov. 5, 1996, Web browser with dynamic display of information objects during linking; David H. Judson, 395/793; 379/89; 395/200.09, 762, 774 [IMAGE AVAILABLE]

9. 5,570,283, Oct. 29, 1996, Corporate travel controller; John R. Shoolery, et al., 395/205, 601 [IMAGE AVAILABLE]

10. 5,561,703, Oct. 1, 1996, System and method for integration of a paging server into a private branch exchange environment; Cathy L. Arledge, et al., 379/57, 58 [IMAGE AVAILABLE]

11. 5,557,659, Sep. 17, 1996, Electronic mail system having integrated voice messages; Henry C. A. Hyde-Thomson, 379/88, 67, 233 [IMAGE AVAILABLE]

12. 5,553,239, Sep. 3, 1996, Management facility for server entry and application utilization in a multi-node server configuration; David M. Heath, et al., 395/187.01; 380/25; 395/200.12 [IMAGE AVAILABLE]

13. 5,539,736, Jul. 23, 1996, Method for providing LAN address discovery and

terminal emulation for LAN-connected personal computer (PCs) using xerox
network system (XNS); Robert A. Johnson, et al., 370/402, 420 [IMAGE
AVAILABLE]

14. 5,534,438, Jul. 9, 1996, Process for isolating genes and the gene
causative of Huntington's disease and differential 3' polyadenylation in the
gene; Michael Hayden, et al., 435/320.1; 536/23.5, 24.3, 24.31 [IMAGE
AVAILABLE]

15. 5,530,852, Jun. 25, 1996, Method for extracting profiles and topics from
a first file written in a first markup language and generating files in
different markup languages containing the profiles and topics for use in
accessing data described by the profiles and topics; Carl F. Meske, Jr., et
al., 395/610; 364/280.4, 280.6, 282.4, DIG.1; 395/200.03, 200.09, 500 [IMAGE
AVAILABLE]

16. 5,513,013, Apr. 30, 1996, Facsimile output job sorting unit and system;
Youti Kuo, 358/448; 271/290, 298; 379/100 [IMAGE AVAILABLE]

17. 5,497,339, Mar. 5, 1996, Portable apparatus for providing multiple
integrated communication media; Marc A. Bernard, 364/705.05; 395/500 [IMAGE
AVAILABLE]

18. 5,491,820, Feb. 13, 1996, Distributed, intermittently connected,
object-oriented database and management system; Edward Belove, et al.,
395/603; 364/246.92, 249.8, 260.3, 967, DIG.1, DIG.2; 395/200.09, 821, 894
[IMAGE AVAILABLE]

19. 5,482,845, Jan. 9, 1996, Method for construction of normalized cDNA
libraries; Marcelo B. Soares, et al., 435/91.1, 6; 536/25.4; 935/80 [IMAGE
AVAILABLE]

20. 5,479,411, Dec. 26, 1995, Multi-media integrated message arrangement;
Robert M. Klein, 379/88; 358/402, 403, 462; 379/68, 93 [IMAGE AVAILABLE]

21. 5,468,612, Nov. 21, 1995, 9804 gene and methods of use thereof; Edward
H. Cohen, et al., 435/6, 320.1, 365; 536/23.5; 935/1, 22, 24, 76, 77, 78
[IMAGE AVAILABLE]

22. 5,457,797, Oct. 10, 1995, Flexible multi-platform partitioning for
computer applications; Paul Butterworth, et al., 395/682; 364/230.3, 280,
281.3, DIG.1; 395/683 [IMAGE AVAILABLE]

23. 5,452,341, Sep. 19, 1995, Integrated voice processing system; Sohail
Sattar, 379/88, 201, 216 [IMAGE AVAILABLE]

24. 5,414,817, May 9, 1995, Adapter unit for connecting a mobile computer to
a network and for simulating the presence of the mobile computer when the
mobile computer is not present; Ali S. Ezzet, et al., 395/837; 364/239.8,
242.5, 940, DIG.1, DIG.2 [IMAGE AVAILABLE]

25. 5,406,557, Apr. 11, 1995, Interenterprise electronic mail hub; Claude R.
Baudoin, 370/407, 428, 465; 379/89, 94, 207; 395/200.18 [IMAGE AVAILABLE]

26. 5,404,231, Apr. 4, 1995, Sender-based facsimile store and forward
facility; Mark C. Bloomfield, 358/400, 405, 407, 440 [IMAGE AVAILABLE]

27. 5,392,277, Feb. 21, 1995, Routing to intelligence; Lawrence Bernstein,
370/399, 434; 379/45, 207, 221, 269, 334 [IMAGE AVAILABLE]

28. 5,390,169, Feb. 14, 1995, Routing to intelligence; Lawrence Bernstein, 370/399, 434; 379/269, 334 [IMAGE AVAILABLE]

29. 5,388,255, Feb. 7, 1995, System for updating local views from a global database using time stamps to determine when a change has occurred; Bogdan Pytlik, et al., 395/604; 364/282.4, 974, 974.7, DIG.1, DIG.2; 395/619 [IMAGE AVAILABLE]

30. 5,379,296, Jan. 3, 1995, Method and apparatus for interfacing a workstation to a plurality of computer platforms; Robert A. Johnson, et al., 370/402, 469, 474 [IMAGE AVAILABLE]

31. 5,339,358, Aug. 16, 1994, Telephone keypad matrix; Adel Danish, et al., 379/368; 341/20, 22, 23, 28; 379/94, 95, 100, 355, 387 [IMAGE AVAILABLE]

32. 5,333,266, Jul. 26, 1994, Method and apparatus for message handling in computer systems; Wade Boaz, et al., 395/200.01; 379/89, 94, 100 [IMAGE AVAILABLE]

33. 5,295,181, Mar. 15, 1994, Automatic facsimile output recipient telephoning system; Youti Kuo, 379/100 [IMAGE AVAILABLE]

34. 5,255,305, Oct. 19, 1993, Integrated voice processing system; Sohail Sattar, 379/34, 88, 97, 201, 216 [IMAGE AVAILABLE]

35. 5,247,591, Sep. 21, 1993, Method and apparatus for the primary and secondary routing of fax mesages using hand printed characters; Paul Baran, 382/179; 283/117; 358/402, 440; 382/317 [IMAGE AVAILABLE]

36. 5,243,643, Sep. 7, 1993, Voice processing system with configurable caller interfaces; Sohail Sattar, et al., 379/88, 97, 142, 201 [IMAGE AVAILABLE]

37. 5,115,326, May 19, 1992, Method of encoding an E-mail address in a fax message and routing the fax message to a destination on a network; Ken L. Burgess, et al., 358/440, 402, 407 [IMAGE AVAILABLE]

38. 4,999,481, Mar. 12, 1991, Method and apparatus for sequentially numbering mail pieces; Patricia B. Baer, et al., 235/375, 432, 494; 364/464.18 [IMAGE AVAILABLE]

39. 4,998,204, Mar. 5, 1991, Mailing system and method for low volume mailers printing postage information upon inserts; Ronald P. Sansone, et al., 364/464.14, 464.16, 464.18 [IMAGE AVAILABLE]

40. 4,962,454, Oct. 9, 1990, Batch mailing method and apparatus: printing unique numbers on mail pieces and statement sheet; Ronald P. Sansone, et al., 364/464.18; 235/495 [IMAGE AVAILABLE]

41. 4,947,333, Aug. 7, 1990, Batch mailing system; Ronald P. Sansone, et al., 364/464.13, 464.16 [IMAGE AVAILABLE]

42. 4,907,161, Mar. 6, 1990, Batch mailing system; Ronald P. Sansone, et al., 364/464.13; 235/375; 364/918, 918.52, 918.7, 919.4, 920, 930, 930.4, 930.41, 932.8, 949.96, 964, 964.4, 969, 969.4, DIG.2 [IMAGE AVAILABLE]

43. 4,855,920, Aug. 8, 1989, Postage accounting device; Ronald P. Sansone, et al., 364/464.11; 235/375, 382; 395/230 [IMAGE AVAILABLE]

44. 4,853,865, Aug. 1, 1989, Mailing system with postage value printing

capability; Ronald P. Sansone, et al., 364/464.13; 235/375; 364/464.18 [IMAGE AVAILABLE]

45. 4,853,864, Aug. 1, 1989, Mailing systems having postal funds management; William G. Hart, et al., 364/464.13; 379/107 [IMAGE AVAILABLE]

46. 4,837,701, Jun. 6, 1989, Mail processing system with multiple work stations; Ronald P. Sansone, et al., 364/464.14, 464.2 [IMAGE AVAILABLE]

47. 4,821,195, Apr. 11, 1989, Method and apparatus for sequentially numbering mail pieces; Patricia B. Baer, et al., 364/464.14; 235/494; 364/464.18; 379/107 [IMAGE AVAILABLE]

48. 4,780,835, Oct. 25, 1988, System for detecting tampering with a postage value accounting unit; Mark E. Sievel, et al., 364/550; 340/825.32, 825.35; 364/464.18; 380/25 [IMAGE AVAILABLE]

49. 4,760,534, Jul. 26, 1988, Mailing system with postage value transfer and accounting capability; Guy L. Fougere, et al., 364/464.16; 235/375, 380 [IMAGE AVAILABLE]

50. 4,760,532, Jul. 26, 1988, Mailing system with postage value transfer and accounting capability; Ronald P. Sansone, et al., 364/464.13; 235/375; 364/464.18; 380/23 [IMAGE AVAILABLE]

=> electronic(p)mail
        240086 ELECTRONIC
          7623 MAIL
L2   1467 ELECTRONIC(P)MAIL

=> l2 and server
          4263 SERVER
L3   366 L2 AND SERVER

=> l3 and host
         49320 HOST
L4   153 L3 AND HOST

=> l4 and reply
          4599 REPLY
L5   42 L4 AND REPLY

=> d 1-42

1. 5,627,764, May 6, 1997, Automatic electronic messaging system with feedback and work flow administration; Jeffrey A. Schutzman, et al., 364/514R; 358/402 [IMAGE AVAILABLE]

2. 5,623,600, Apr. 22, 1997, Virus detection and removal apparatus for computer networks; Shuang Ji, et al., 395/187.01; 364/286.4, DIG.1 [IMAGE AVAILABLE]

3. 5,621,797, Apr. 15, 1997, Electronic ticket presentation and transfer method; Sholom S. Rosen, 380/24, 25, 30 [IMAGE AVAILABLE]

4. 5,613,155, Mar. 18, 1997, Bundling client write requests in a **server**; Frank P. Baldiga, et al., 395/825, 200.13, 427, 439, 840, 841 [IMAGE AVAILABLE]

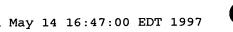5. 5,613,012, Mar. 18, 1997, Tokenless identification system for

authorization of electronic transactions and electronic transmissions; Ned Hoffman, et al., 382/115; 235/380; 902/3 [IMAGE AVAILABLE]

6. 5,611,050, Mar. 11, 1997, Method for selectively performing event on computer controlled device whose location and allowable operation is consistent with the contextual and locational attributes of the event; Marvin M. Theimer, et al., 395/200.09; 340/825.49; 395/826 [IMAGE AVAILABLE]

7. 5,603,054, Feb. 11, 1997, Method for triggering selected machine event when the triggering properties of the system are met and the triggering conditions of an identified user are perceived; Marvin M. Theimer, et al., 395/826; 340/825.49; 395/200.09 [IMAGE AVAILABLE]

8. 5,600,833, Feb. 4, 1997, Attribute portion based document retrieval system with system query language interface; Jeffrey A. Senn, et al., 395/601, 500 [IMAGE AVAILABLE]

9. 5,581,753, Dec. 3, 1996, Method for providing session consistency guarantees; Douglas B. Terry, et al., 395/617; 364/285, 974.1, DIG.1, DIG.2; 395/480, 670 [IMAGE AVAILABLE]

10. 5,561,703, Oct. 1, 1996, System and method for integration of a paging **server** into a private branch exchange environment; Cathy L. Arledge, et al., 379/57, 58 [IMAGE AVAILABLE]

11. 5,557,798, Sep. 17, 1996, Apparatus and method for providing decoupling of data exchange details for providing high performance communication between software processes; Marion D. Skeen, et al., 395/235; 364/280, 281.3, 284, 284.3, DIG.1; 395/200.01, 682 [IMAGE AVAILABLE]

12. 5,557,518, Sep. 17, 1996, Trusted agents for open electronic commerce; Sholom S. Rosen, 380/24; 235/375, 379, 380, 381; 380/4, 21, 23, 25; 395/217, 244; 902/1, 2, 7, 26 [IMAGE AVAILABLE]

13. 5,555,376, Sep. 10, 1996, Method for granting a user request having locational and contextual attributes consistent with user policies for devices having locational attributes consistent with the user request; Marvin M. Theimer, et al., 395/200.09; 364/222.2, 222.5, 252.2, DIG.1; 395/187.01 [IMAGE AVAILABLE]

14. 5,555,346, Sep. 10, 1996, Event-driven rule-based messaging system; Kevin C. Gross, et al., 395/51, 50, 925 [IMAGE AVAILABLE]

15. 5,553,289, Sep. 3, 1996, System for automatically assigning attributes to objects of multimedia distribution when the objects being within a predetermined relationship; William J. Johnson, et al., 395/701, 200.15, 653, 674, 680 [IMAGE AVAILABLE]

16. 5,544,321, Aug. 6, 1996, System for granting ownership of device by user based on requested level of ownership, present state of the device, and the context of the device; Marvin M. Theimer, et al., 395/200.11; 364/222.2, 222.5, 252.2, DIG.1; 380/49; 395/187.01 [IMAGE AVAILABLE]

17. 5,544,062, Aug. 6, 1996, Automated system for manufacturing of customized military uniform insignia badges; Louie E. Johnston, Jr., 364/468.24, 188, 470.01, 479.03 [IMAGE AVAILABLE]

18. 5,530,740, Jun. 25, 1996, System and method for integrating voice, facsimile and **electronic mail** data through a personal computer; Roberto Irribarren, et al., 379/89, 67, 94, 100, 212 [IMAGE AVAILABLE]

19. 5,522,073, May 28, 1996, Method and apparatus for automating and controlling execution of software tools and tool sets via when/then relationships; Joseph J. Courant, et al., 395/701; 364/280, 281.3, 286, DIG.1; 395/680 [IMAGE AVAILABLE]

20. 5,506,952, Apr. 9, 1996, Method and system for guiding the formation of a correctly structured instruction for data processing systems; Siu H. Choy, et al., 395/348, 352 [IMAGE AVAILABLE]

21. 5,495,600, Feb. 27, 1996, Conversion of queries to monotonically increasing incremental form to continuously query a append only database; Douglas B. Terry, et al., 395/603; 364/974, 974.6, DIG.2 [IMAGE AVAILABLE]

22. 5,493,692, Feb. 20, 1996, Selective delivery of electronic messages in a multiple computer system based on context and environment of a user; Marvin M. Theimer, et al., 455/26.1; 340/825.31, 825.49; 379/38, ·57; 380/3, 23 [IMAGE AVAILABLE]

23. 5,491,820, Feb. 13, 1996, Distributed, intermittently connected, object-oriented database and management system; Edward Belove, et al., 395/603; 364/246.92, 249.8, 260.3, 967, DIG.1, DIG.2; 395/200.09, 821, 894 [IMAGE AVAILABLE]

24. 5,485,579, Jan. 16, 1996, Multiple facility operating system architecture; David Hitz, et al., 395/200.12; 364/280, 280.6, 280.9, 284, 284.3, 284.4, DIG.1; 395/200.02, 677 [IMAGE AVAILABLE]

25. 5,483,352, Jan. 9, 1996, Computer able to link **electronic** **mail** functions with telephone functions; Noriyuki Fukuyama, et al., 358/402, 440, 444; 379/93, 355 [IMAGE AVAILABLE]

26. 5,452,341, Sep. 19, 1995, Integrated voice processing system; Sohail Sattar, 379/88, 201, 216 [IMAGE AVAILABLE]

27. 5,444,702, Aug. 22, 1995, Virtual network using asynchronous transfer mode; John L. Burnett, et al., 370/254, 397 [IMAGE AVAILABLE]

28. 5,438,658, Aug. 1, 1995, Method and system for time critical response management in a data processing system; Greg P. Fitzpatrick, et al., 395/331, 346 [IMAGE AVAILABLE]

29. 5,428,784, Jun. 27, 1995, Method and apparatus for linking **electronic** **mail** and an **electronic** calendar to p
rovide a dynamic response to an
electronic **mail** message; Robert B. Cahill, Jr., 395/680; 364/705.08, 918, 937, 940, 949.3, DIG.2; 395/200.01 [IMAGE AVAILABLE]

30. 5,406,557, Apr. 11, 1995, Interenterprise **electronic** **mail** hub; Claude R. Baudoin, 370/407, 428, 465; 379/89, 94, 207; 395/200.18 [IMAGE AVAILABLE]

31. 5,371,794, Dec. 6, 1994, Method and apparatus for privacy and authentication in wireless networks; Whitfield Diffie, et al., 380/21, 30 [IMAGE AVAILABLE]

32. 5,333,266, Jul. 26, 1994, Method and apparatus for message handling in computer systems; Wade Boaz, et al., 395/200.01; 379/89, 94, 100 [IMAGE AVAILABLE]

33. 5,325,310, Jun. 28, 1994, Method and system for persistant **electronic
mail reply** processing; W
illiam J. Johnson, et al., 364/514R; 358/402
[IMAGE AVAILABLE]

34. 5,283,856, Feb. 1, 1994, Event-driven rule-based messaging system; Kevin
C. Gross, et al., 395/51, 50, 60, 925 [IMAGE AVAILABLE]

35. 5,257,369, Oct. 26, 1993, Apparatus and method for providing decoupling
of data exchange details for providing high performance communication between
software processes; Marion D. Skeen, et al., 395/680; 364/239.9, 240.8,
240.9, 284, DIG.1; 395/200.01 [IMAGE AVAILABLE]

36. 5,255,305, Oct. 19, 1993, Integrated voice processing system; Sohail
Sattar, 379/34, 88, 97, 201, 216 [IMAGE AVAILABLE]

37. 5,243,643, Sep. 7, 1993, Voice processing system with configurable .
caller interfaces; Sohail Sattar, et al., 379/88, 97, 142, 201 [IMAGE
AVAILABLE]

38. 5,208,748, May 4, 1993, Method and apparatus for structuring and
managing human communications by explicitly defining the types of
communications permitted between participants; Carlos F. Flores, et al.,
395/751 [IMAGE AVAILABLE]

39. 5,187,787, Feb. 16, 1993, Apparatus and method for providing decoupling
of data exchange details for providing high performance communication between
software processes; Marion D. Skeen, et al., 395/680; 364/225, 227.2, 240.8,
242.94, 242.95, 242.96, 246.3, 260.4, 260.9, 281.3, 282.1, 284, 284.3, 284.4,
DIG.1; 395/200.01, 200.09 [IMAGE AVAILABLE]

40. 5,060,150, Oct. 22, 1991, Process creation and termination monitors for
use in a distributed message-based operating system; Gabor Simor, 395/680;
364/264, 280, 280.6, 284, 284.3 [IMAGE AVAILABLE]

41. 4,792,896, Dec. 20, 1988, Storage controller emulator providing
transparent resource sharing in a computer system; William M. Maclean, et
al., 395/500; 364/228.1, 229, 229.5, 230, 230.4, 230.5, 230.6, 231, 232.3,
232.7, 232.8, 234, 234.4, 235, 235.7, 236.2, 236.3, 238.3, 239, 239.1, 239.2,
239.3, 239.6, 240.8, 240.9, 241, 241.9, 242.1, 242.2, 242.94, 243, 243.3,
244, 244.6, 247, 247.8, 248.1, 262.4, 262.6, 262.9, 265, 265.1, 280, 280.2,
280.9, 281.3, 281.7, 282.1, 284, 284.3, DIG.1 [IMAGE AVAILABLE]

42. 4,731,750, Mar. 15, 1988, Workstation resource sharing; Martha A.
Hoflich, et al., 395/200.01; 364/940.61, 948.22, 967, 967.4, DIG.2 [IMAGE
AVAILABLE]

=> d his

        (FILE 'USPAT' ENTERED AT 16:29:48 ON 14 MAY 1997)

                SET PAGE SCROLL
L1   50 E-MAIL(P)SERVER
L2   1467 ELECTRONIC(P)MAIL
L3   366 L2 AND SERVER
L4   153 L3 AND HOST
L5   42 L4 AND REPLY

=> 14 and store
        139990 STORE

```
L6           120 L4 AND STORE

=> l6 and identify
          93414 IDENTIFY
L7            78 L6 AND IDENTIFY

=> l7 and optomiz###
             73 OPTOMIZ###
L8             0 L7 AND OPTOMIZ###

=> electronic(p)mail(p)optomize
         240086 ELECTRONIC
           7623 MAIL
             30 OPTOMIZE
L9             0 ELECTRONIC(P)MAIL(P)OPTOMIZE

=> server(p)data(p)identifier
           4263 SERVER
         410313 DATA
          10698 IDENTIFIER
L10          177 SERVER(P)DATA(P)IDENTIFIER

=> l10 and wan
            755 WAN
L11           22 L10 AND WAN

=> d 1-22
```

1. 5,602,992, Feb. 11, 1997, System for synchronizing data stream transferred from server to client by initializing clock when first packet is received and comparing packet time information with clock; Gunner Danneels, 395/200.19; 370/507 [IMAGE AVAILABLE]

2. 5,600,644, Feb. 4, 1997, Method and apparatus for interconnecting LANs; Tian-Pong P. Chang, et al., 370/404, 257, 396, 469 [IMAGE AVAILABLE]

3. 5,596,579, Jan. 21, 1997, High performance machine for switched communications in a heterogeneous data processing network gateway; Mehrad Yasrebi, 395/678, 200.2 [IMAGE AVAILABLE]

4. 5,594,921, Jan. 14, 1997, Authentication of users with dynamically configurable protocol stack; Christopher E. Pettus, 395/831; 380/25; 395/200.02, 200.09, 821 [IMAGE AVAILABLE]

5. 5,581,552, Dec. 3, 1996, Multimedia server; Seyhan Civanlar, et al., 370/396, 401 [IMAGE AVAILABLE]

6. 5,560,008, Sep. 24, 1996, Remote authentication and authorization in a distributed data processing system; Donavon W. Johnson, et al., 395/680; 364/284.4, DIG.1; 395/186, 200.09 [IMAGE AVAILABLE]

7. 5,557,798, Sep. 17, 1996, Apparatus and method for providing decoupling of data exchange details for providing high performance communication between software processes; Marion D. Skeen, et al., 395/235; 364/280, 281.3, 284, 284.3, DIG.1; 395/200.01, 682 [IMAGE AVAILABLE]

8. 5,548,726, Aug. 20, 1996, System for activating new service in client server network by reconfiguring the multilayer network protocol stack dynamically within the server node; Christopher E. Pettus, 395/200.09; 364/222.2, 284.4, 940.71, DIG.1, DIG.2; 395/614 [IMAGE AVAILABLE]

9. 5,526,353, Jun. 11, 1996, System and method for communication of audio
data over a packet-based network; Arthur Henley, et al., 370/392, 404, 471,
474; 375/241, 371 [IMAGE AVAILABLE]

10. 5,517,622, May 14, 1996, Method and apparatus for pacing communications
in a distributed heterogeneous network; Mario J. Ivanoff, et al., 395/200.13;
364/232.22, 242.96, DIG.1; 370/256, 408; 395/200.11, 849 [IMAGE AVAILABLE]

11. 5,502,766, Mar. 26, 1996, Data enclave and trusted path system; William
E. Boebert, et al., 380/25, 4, 23, 49 [IMAGE AVAILABLE]

12. 5,499,297, Mar. 12, 1996, System and method for trusted path
communications; William E. Boebert, 380/23, 21, 25, 49 [IMAGE AVAILABLE]

13. 5,485,455, Jan. 16, 1996, Network having secure fast packet switching
and guaranteed quality of service; Kurt Dobbins, et al., 370/255, 409 [IMAGE
AVAILABLE]

14. 5,473,608, Dec. 5, 1995, Method and apparatus for managing and
facilitating communications in a distributed heterogeneous network; Bruce N,
Gagne, et al., 370/401 [IMAGE AVAILABLE]

15. 5,463,625, Oct. 31, 1995, High performance machine for switched
communications in a heterogeneous data processing network gateway; Mehrad
Yasrebi, 370/401; 395/672, 684 [IMAGE AVAILABLE]

16. 5,400,338, Mar. 21, 1995, Parasitic adoption of coordinate-based
addressing by roaming node; George H. Flammer, III, 370/255, 332, 400;
379/60; 455/33.2, 56.1 [IMAGE AVAILABLE]

17. 5,329,619, Jul. 12, 1994, Cooperative processing interface and
communication broker for heterogeneous computing environments; Peter Page, et
al., 395/200.01, 615 [IMAGE AVAILABLE]

18. 5,317,568, May 31, 1994, Method and apparatus for managing and
facilitating communications in a distributed hetergeneous network; Joy P.
Bixby, et al., 370/401 [IMAGE AVAILABLE]

19. 5,303,336, Apr. 12, 1994, Printing system including print server; Seiji
Kageyama, et al., 395/114, 112 [IMAGE AVAILABLE]

20. 5,276,735, Jan. 4, 1994, Data enclave and trusted path system; William
E. Boebert, et al., 380/21, 4, 25, 49 [IMAGE AVAILABLE]

21. 5,257,369, Oct. 26, 1993, Apparatus and method for providing decoupling
of data exchange details for providing high performance communication between
software processes; Marion D. Skeen, et al., 395/680; 364/239.9, 240.8,
240.9, 284, DIG.1; 395/200.01 [IMAGE AVAILABLE]

22. 5,014,221, May 7, 1991, Mechanism for arbitrating client access to a
networked print server; Jeffrey C. Mogul, 395/113; 364/926.1, 926.6, 926.9,
926.93, 927.92, 927.93, 930, 935.41, 937, 937.01, 938, 940.61, 940.62,
940.81, 941, 941.4, 941.6, 942.7, 948.11, 950, 950.3, DIG.2 [IMAGE AVAILABLE]

=> d 5 ab

US PAT NO: 5,581,552 [IMAGE AVAILABLE]   L11: 5 of 22

ABSTRACT:

A pool of multimedia servers, which may be geographically diverse, are available to be allocated to serve one of at least two ELANs served by an ELAN contronect network. These multimedia servers are a) connected to, b) dynamically allocated to sub-ELANs, and c) managed by, a multimedia server manager, which is included as part of the ELAN contronect network. In particular, each of the multimedia servers is capable of having its addresses dynamically reconfigured in response to commands from the multimedia server manager to match that of an ELAN to which it is being made available, so that the multimedia server becomes a part of that ELAN. The multimedia server manager obtains a layer-3 address from address server 427 of the ELAN contronect network which it then assigns to the multimedia server so that the multimedia server appears to be a part of the ELAN to which it is assigned to serve. The multimedia server manager also supplies to the multimedia server the LES and BUS address of a sub-ELAN of the ELAN to which it is assigned to serve. The multimedia server can then join with the LES and BUS as a LEC in that sub-ELAN.

```
=> electronic(p)mail(p)server(p)reply
        240086 ELECTRONIC
          7623 MAIL
          4263 SERVER
          4599 REPLY
L12          0 ELECTRONIC(P)MAIL(P)SERVER(P)REPLY

=>
```

```
User ID:            d234trp
User Name:          THOMAS R. PEESO
User Phone:         0003059784
Workstation Id:     WSHBUERZ
Printer Id:         werzptr
Job #               0184
```